

**We claim:**

1. A frontlit touch panel for use with a reflective light valve, comprising a front light guide having at least one light input face that supplies light to the guide, a viewing face, a light output face opposite the viewing face, and at least one component of a touch-sensitive transducer, the light output face having a light extraction layer thereon having a substantially flat light exit face and containing buried reflective facets that extract supplied light from the guide through the light exit face.
2. A touch panel according to claim 1, wherein the guide has a reflective face opposite the light input face, and some of the facets are inclined so that supplied light reflected from the reflective face is extracted from the guide via such inclined facets.
3. A touch panel according to claim 1, wherein the guide comprises a planar glass sheet and the extraction layer comprises a structured surface that faces the guide and a smooth face that faces away from the guide.
4. A touch panel according to claim 1, wherein the extraction layer comprises a film having a structured surface comprising a plurality of projections that face the guide, and wherein pockets adjacent the facets and between the projections contain a medium having a lower refractive index than the material from which the film is made.
5. A touch panel according to claim 4, wherein the projections have a generally trapezoidal shape.
6. A touch panel according to claim 4, wherein the projections comprise the facets and further comprise risers and plateaus, and wherein supplied light passes from the light output face through a plateau and then is reflected from a facet through the light exit face.
7. A touch panel according to claim 4, wherein lands separate the projections and wherein the pockets contain air.

8. A touch panel according to claim 7, wherein the ratio of ratio of total plateau length to total land length is greater than 1:1.
9. A touch panel according to claim 8, wherein the ratio is greater than 3:1.
10. A touch panel according to claim 4, wherein the projections have dimensions, pitch and angular orientation such that supplied light is evenly distributed across the viewing face.
11. A touch panel according to claim 4, wherein supplied light that is reflected from the exit face and refracted through a facet is recaptured by being refracted through a nearby facet and directed into the light extraction layer.
12. A touch panel according to claim 4, wherein the projections are spaced at a relatively coarser pitch near the light input face and at a relatively finer pitch further from the light input face.
13. A touch panel according to claim 4, wherein the projections have dimensions, pitch and angular orientation such that Moiré patterns are not visible on the viewing face.
14. A touch panel according to claim 1, wherein substantially all the facet area is accessible to the supplied light.
15. A touch panel according to claim 1, further comprising an antireflection coating on the light exit face.
16. A touch panel according to claim 1, wherein the touch-sensitive transducer comprises a resistive touch panel.
17. A touch panel according to claim 1, wherein the touch-sensitive transducer comprises a capacitive overlay, guided acoustic wave, surface acoustic wave or near field imaging touch panel.

18. A touch panel according to claim 1, wherein application of the component to the front light guide requires temperatures or processing conditions that would destroy the light extraction layer.

19. A touch panel according to claim 17, wherein the component comprises a layer comprising indium tin oxide and the light extraction layer comprises a structured surface plastic film.

20. An illuminated touch panel display comprising:

- a) at least one light source;
- b) a front light guide having at least one light input face through which light from the source can be supplied to the guide, a viewing face, a light output face opposite the viewing face, and at least one component of a touch-sensitive transducer, the light output face having a light extraction layer thereon having a substantially flat light exit face and containing buried reflective facets that extract supplied light from the guide through the light exit face; and
- c) a reflective light valve that receives extracted light from the guide and returns at least some of that light through the viewing face.

21. A display according to claim 19, wherein the extraction layer comprises a film having a structured surface comprising a plurality of projections that face the guide, and wherein pockets adjacent the facets and between the projections contain a medium having a lower refractive index than the material from which the film is made.

22. A display according to claim 19, further comprising an antireflection coating on the light exit face and an air gap between such coating and the light valve.

23. A cellular telephone, pager, personal digital assistant, clock, watch, calculator, laptop computer or transportation vehicle comprising a display according to claim 19.